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# Land & Air & Water

Volume 11 Number 3  
Fall 2000



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Kentucky Natural Resources and Environmental Protection Cabinet

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## Land Air & Water

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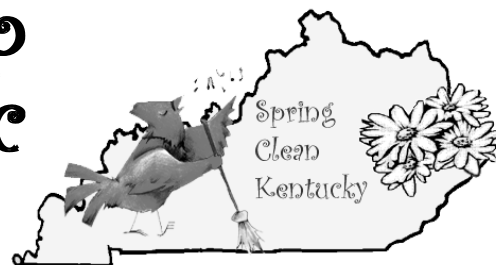
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# Cleaning up is an artistic event



By Heather Frederick

Public Information and Education Branch

You can see the state of Kentucky taking a bubble bath in one of the winning posters from this year's Commonwealth Cleanup Week poster contest. Students with other artistic ideas are encouraged to make plans now for next year's creative competition.

The Commonwealth Cleanup Week poster contest allows students to take the idea of cleaning up the state and put it into pictures. The event is part of the annual, weeklong effort to "spring clean" Kentucky. The poster contest helps publicize Commonwealth Cleanup Week and offers students an opportunity to win savings bonds worth up to \$150. Teachers who want to make the contest part of their lesson plans can obtain supplementary educational materials from the Kentucky Natural Resources and Environmental Protection Cabinet.

The contest is open to all students, both public and nonpublic. Each school that participates in the contest selects one winner in each of the contest's three grade categories: 1-2, 3-5 and 6-8. Then, the school-winning entries are submitted to the county conservation district for judging at the county level. County winners are forwarded to the cabinet for the selection of statewide winners.

This year, the deadline for schools to submit their winning entries to the conservation districts has been extended to **Feb. 15**. Only entries submitted to the conservation districts are eligible for county- and state-level competition. The cabinet will announce statewide winners in March 2001.

For more information on the poster contest, visit the contest Web page at <http://www.kyenvironment.org/nrepc/cabinet/cleanupposter.htm> or call Heather Frederick in the Public Information and Education Branch at (502) 564-5525.

## Land Air & Water Online

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## On our cover

(Top) This damselfly, Familiar bluet (*Enallagma civile*), was observed at the Fish Hatchery in Frankfort. It is often one of the last damselfly species seen before fall gives way to winter, by Ellis Lauder milk, Kentucky State Nature Preserves Commission; (Left) A female Red-bellied woodpecker (*Melanerpes carolinus*), a common resident throughout most of Kentucky, by Gary Ritter, Frankfort; and (Right) Trees reach for the sky at the Big South Fork National River and Recreation Area of the Daniel Boone National Forest in Kentucky, also by Gary Ritter.



1-2



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9-10

# Environmental Response Team put to the test in 2000

By Maleva Chamberlain  
Division of Water

*Thousands of gallons of black slime covered a Kentucky golf course, then a flaming warehouse sent bourbon flowing into the Kentucky River. These major environmental incidents earlier this year emphasized the importance of the state's Environmental Response Team. Dealing with these emergencies, the worst ever of their kind in the state, called for the long hours and quick response that this team exemplifies.*



## **“Up from the ground came a bubblin’ crude”**

When people living near the Southwind Golf Course smelled strong petroleum odors on Jan. 27, they called the Clark County Fire Department, which contacted county emergency management personnel. Because the pipeline break was below the surface, the source of the odors was not immediately evident. But then oil bubbled up out of the earth and began to cover everything in its path as it moved downhill toward Two Mile Creek. Local emergency management officials contacted the Kentucky Department of Environmental Protection’s Emergency Response Team (ERT) within 30 minutes of the discovery of the spill. Rapid containment efforts by local fire, emergency management and road department personnel in conjunction with ERT’s Tom Gabbard (Division of Water) and John Floyd (Division of Waste Management) prevented contamination of the Kentucky River and major water intakes downstream.

Crude oil from Kuwait had been pumped into the pipeline on its way to the Marathon Ashland refinery at Catlettsburg. When the pipeline broke, it poured almost 500,000 gallons of oil over a 1.5-mile area. Vacuum trucks recovered as much oil as possible from the surface of the land and creek. Additional equipment scraped and removed truckloads of contaminated soil.

ERT personnel stayed at the scene 24 hours a day for 15 days to oversee efforts to prevent the oil from reaching the Kentucky River and to work with the many groups and agencies at the site as they developed short- and long-term cleanup plans. Representatives of Marathon Ashland Petroleum, county and state emergency management, the U.S. Environmental Protection Agency (EPA), the Coast Guard, the state fire marshal’s office, mitigation and cleanup contractors and a myriad of local support groups worked together throughout the emergency phase of the incident. Some 260 people were on site during each shift for the first five days following the spill. Superfund personnel from the Kentucky

Division of Waste Management continue to oversee cleanup at the site, which may take years to complete. Because of the spill, Marathon Ashland Pipeline LLC received a notice of violation from the Kentucky Department for Environmental Protection. The notice cited the company for creating an environmental emergency, discharging or allowing the discharge of a pollutant into the waters of the Commonwealth and degrading the waters of the Commonwealth.

## **“Whiskey River”**

A warehouse full of almost 17,000 barrels of whiskey (approximately 600,000 gallons) at the Wild Turkey Distillery in Lawrenceburg went up in flames on May 9. The bourbon poured down the hill on which the warehouse sat and flowed into the Kentucky River. Flames from the warehouse fire threatened the nearby Lawrenceburg water treatment plant. In addition, the plant’s intake was directly in the area of the spill. The plant was shut down until a temporary intake could be constructed





**Opposite page: (Left) Oil from the pipeline spill spread onto the earth. (Below left) Vacuum trucks recovered as much oil from the soil and creek as possible. (Above left) The burning warehouse was not far from the water treatment plant. (Above right) Compressors on the barge pump air into the Kentucky River.** Photos by Gene Blair, Environmental Response Team

farther upstream.

Tom Gabbard and Gene Blair, ERT supervisor, feared a fish kill from the alcohol but did not see one immediately. However, microbes had begun to feed on the bourbon in the river and to reproduce, reducing oxygen levels in the river. Within two days, people began to report dead fish along the banks of the river at Frankfort above Lock and Dam 4; the reports increased as the plume of oxygen-depleted water moved downriver. The mass reached from shore to shore and from the top to bottom of the river, stretching out over five miles. Fish tried to swim away from it but could survive only by finding a tributary to escape to or by staying ahead of the plume. Once the plume reached one of the dams, the fish were trapped.

The Kentucky Department of Fish and Wildlife Resources, along with ERT and other Kentucky Division of Water personnel, could do little more than monitor the progress of the plume.

The EPA, together with the Coast Guard's Gulf "Strike Team" tried to aerate the river water using equipment mounted on barges. Pumps on one barge pulled water up and sprayed it back into the river, adding oxygen. Compressors on a second barge forced air into the water, like

blowing through a straw into a glass of water. The barges began work above Lock and Dam 3 and followed the plume as it traveled downstream. Finally, oxygen levels began to rise and fish survived as the slug reached Lock and Dam 1 at Carrollton. The plume went over the dam and on to the Ohio River without any more damage.

The incident killed hundreds of thousands of fish including paddlefish, channel catfish, sauger, carp and buffalo fish. It also took a toll on the budgets of many agencies, including the ERT, EPA, Kentucky Department of Fish and Wildlife Resources, Coast Guard, Bureau of Alcohol, Tobacco and Firearms, state fire marshal and local fire and emergency management teams.

The Department of Fish and Wildlife Resources continues to restock the river with fish, but the older, larger fish cannot be replaced. Only time will allow the young ones to attain the size and reproductive maturity of those that were lost, and it may not be possible to replace some species.

The Division of Water issued a notice of violation to the distillery's owner, Boulevard Distillers and Importers Inc. The notice cited several violations, including creating an environmental

emergency, discharging or allowing the discharge of pollutants into the waters of the Commonwealth and degrading the waters of the Commonwealth.

Not all calls to the ERT result in immediate on-scene responses. Many are notifications required by law, and others can be handled by telephone initially. Of the 3,654 notifications in 1999, 221 required immediate responses by ERT personnel. The ERT concentrates on situations that pose an immediate threat to the public or environment. For example, if a facility spills 30 gallons of gasoline, contains the spill on its property and cleans it up, it must notify the ERT, but emergency personnel do not need to go to the facility. Instead, an inspector will follow up during regular business hours.

Central office ERT staff, Gene Blair and Joe Schmidt, have to determine whether or not a call represents an actual emergency. "We have to determine whether or not we have enough information to act on; then we have to decide what the proper response to the incident is," Blair said. "Sometimes we send someone to a scene and discover there really wasn't an emergency."

Calls about fish kills are tricky to evaluate. People often over- or underestimate the number of dead fish. There are many kinds of conditions that can result in fish kills, including high temperatures and drought.

Determining the appropriate response to a call from emergency management personnel or a fire department is usually simple. Calls about oil spills aren't, though. "We got one call about a spill of 1,000 gallons of oil," says Schmidt. "In reality, it was a 13-gallon spill with 1,000 gallons of water used to wash it down."

The Kentucky Department of Environmental Protection's Environmental Response Team (ERT) is currently composed of 21 responders and six alternates, representing the Division for Air Quality, Division of Waste Management and Division of Water. ERT responders are on call 24 hours a day in rotational assignment. By law, all "releases" of hazardous substances, pollutants or contaminants, petroleum or petroleum products must be reported to the 24-hour ERT number, (800) 928-2380. This number is to be used for environmental emergencies only.

# New EPA standard could impact air in 18 Kentucky counties

By Lona Brewer  
Division for Air Quality

What you can't see can make you sick, and that's why the U.S. Environmental Protection Agency (EPA) plans to step up its efforts to cut down on ozone levels across the country. The agency's new standard for ozone may find many counties out of compliance.

Ozone is a colorless, odorless pollutant that is formed when other emissions combine with sunlight, heat and humidity. Those other emissions (primarily volatile organic compounds and nitrogen oxides) are released by vehicles, power plants, businesses and gasoline-powered engines like those found on lawnmowers. Ozone can cause health problems for anyone but can especially impact children, the elderly and people with existing respiratory illnesses.

The EPA established a new standard for ozone in 1997 and ordered states to take three years of ozone readings to determine which of their counties would not be in compliance with the new standard. The EPA required states to submit a list of those counties by June 30, 2000.

In a letter dated June 12, 2000, Kentucky Gov. Paul Patton recommended that 18 counties in Kentucky be designated as not meeting the new ozone standard. They are: Jefferson, Bullitt, Oldham, Boone, Campbell, Kenton, Boyd, Greenup, Fayette, Scott, Warren, Simpson, Christian, Marshall, McCracken, Daviess, Henderson and Hancock.

The U.S. Supreme Court plans to rule on the legality of the new standard in 2001. While making his recommendations, Gov. Patton urged the EPA to delay its imposition of the new standard until the court challenge is resolved.

If the Supreme Court upholds the new standard, counties out of compliance will not be automatically forced to use reformulated gas or submit their vehicles to emissions testing. There are a number of options available to counties to bring their ozone levels into compliance with the federal standard.

While the court challenge is pending, the EPA plans to review the information submitted by states and provide initial comments on those recommendations before the end of the year. Throughout the rest of the year, the EPA and the Natural Resources and Environmental Protection Cabinet will hold discussions to clarify any questions about Kentucky's submittal. The EPA is not expected to make final decisions on the designations of areas until spring 2001, with the effective date occurring later that year.



# Protection granted for Black Mountain

By Mark York  
Office of the Secretary

The area near Kentucky's highest peak will be spared from future mining and timber operations, thanks to the state's purchase of mineral and timber rights above 3,800 feet on Black Mountain.

"This agreement marks an historic moment when our Commonwealth has protected the highest elevations of Black Mountain," said Gov. Paul E. Patton. "Future generations of Kentuckians will have the opportunity to recognize the importance of Black Mountain as a priceless natural resource."

The state purchased the mineral and timber rights for around \$4.2 million for the area in Harlan County, near Cumberland. The 2000 General Assembly approved a bond issue for the purchase of the rights.

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**"This agreement marks an historic moment when our Commonwealth has protected the highest elevations of Black Mountain."**

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Gov. Paul E. Patton

The agreement prohibits mining and timber operations above the 3,800-foot elevation and surface mining in the area between 3,200 and 3,800 feet.

Negotiations for the agreement took more than a year to complete. A group called Kentuckians for the Commonwealth (KFTC) filed a legal petition in 1998 to have the area above the 3,000-foot elevation declared off-limits to coal mining. In April 1999, KFTC reached an agreement with the other interested parties that called for the state to begin the process of obtaining timber and mineral rights.

The parties to the agreement are: Jericol Mining Inc., Penn Virginia Corp., The Dale Co., Pardee Resources Group Inc., Pocahontas Development Corp., Jacobe Co., Ark Land Co., Nally and Hamilton Enterprises, Resource Development LLC and Harlan Reclamation Services.

# Lake sampling continues after advisory issued

By Heather Frederick  
Public Information and Education Branch

A McCracken County lake continues to be the subject of scrutiny after laboratory tests found elevated levels of polychlorinated biphenyls (PCBs) and mercury in the tissue of fish taken from the water. The test results prompted three state agencies to issue a fish consumption advisory for Metropolis Lake in July.

The lake is in northwestern McCracken County and is part of a preserve owned and managed by the Kentucky State Nature Preserves Commission. It is a popular site for fishing among local residents.

Fillets of largemouth bass and channel catfish taken from the lake were tested for organic chemical contaminants (PCBs and chlordane) and heavy metals (mercury, cadmium and lead). Scientists found elevated PCBs and mercury levels. Those findings led the Kentucky departments for Public Health, Environmental Protection, and Fish and Wildlife Resources to notify the public that no more than one meal (one-half pound) per month of most fish from the lake should be eaten. Mercury and PCBs can build up in the human body over time; spacing out the meals helps to keep the contaminants from reaching harmful levels.

Aquatic organisms acquire mercury and PCBs from sediments. The levels of the contaminants increase as they move up the food chain. Concentrations of PCBs and mercury in fish can be thousands of times greater than levels in the water where they live.

Mercury is a toxic metal that mainly affects the nervous system. Mercury can cause neurological damage, loss of feeling, hearing, vision and memory, paralysis and developmental delays



## Contaminants in fish

- Build up in the human body.
- Spacing out meals helps prevent buildup.
- Women of childbearing age and children especially susceptible.
- Eat only skinless, boneless fillets with as much fat as possible removed.
- Larger fish tend to have higher levels of contaminants.

in children. Even at low levels of intake, mercury can accumulate in the body and produce symptoms over time. Mercury is found primarily in the muscle (fillets) of fish and is not reduced by cooking.

PCBs are a group of synthetic organic chemicals. Exposure to them is associated with a wide array of adverse health effects in experimental animals, including toxic effects on the immune, nervous and reproductive systems. Although the effects of PCB exposure in humans are not well understood, the EPA has classified PCBs as probable human carcinogens. PCBs accumulate mainly in fatty tissues of fish, so removing the fish's internal

organs and skin and trimming its fat before cooking will decrease exposure to PCBs. Roasting, baking and broiling fish can also help reduce levels of PCBs by melting away some of the contaminated fat. Do not eat



or reuse the fat and juices that cook out of the fish.

The Kentucky Division of Waste Management plans to conduct more research at Metropolis Lake. Researchers will collect surface water and sediment samples in an effort to determine if contaminant levels will require additional characterization and monitoring.

To see a list of all fish advisories for the state of Kentucky, go to this Web page: <http://water.nr.state.ky.us/dow/dwfish.htm>.

(Above) Employees of the Kentucky Department of Fish and Wildlife Resources (KDFWR) and the Kentucky Division of Waste Management (DWM) prepare to collect fish from Metropolis Lake. The KDFWR provides the boats, personnel and equipment to catch the fish. The DWM coordinates fish tissue sampling and takes sediment samples. (Left) Joe Deevers (center, wearing hat) from the Kentucky Division of Water, takes a water sample from the lake. Deevers pulled the sample from near the bottom of the lake. Photos by Jon Maybriar and Janet Miller



(Above) Trainers use computers to simulate conditions a firefighter would experience during fire suppression. (Right) The fire simulator can travel anywhere in the state to help train firefighters. (Below) The screen allows students to see where the fire is located and how equipment and personnel can be used to combat the fire. U.S. Forest Service photos



## Division of Forestry promotes high-tech training for firefighters

By Gwen Holt  
Division of Forestry

Technology on wheels will teach Kentucky firefighters how to battle flames. The state Division of Forestry has teamed up with two other agencies to start training firefighters with a computerized simulator.

The system consists of two computers, fire simulation software, a video projector and a screen. The computers, used by the trainers, are in the front of the trailer and the video projector and the screen are in another room that serves as the classroom for the students. The entire unit is housed in a trailer that can be pulled by a pickup truck for training anywhere in the state.

The National Park Service and the Daniel Boone National Forest have partnered with the Kentucky Division of Forestry to implement this training. Employees of these three agencies will benefit from the simulator, along with rural firefighters.

Trainers use the computers to simulate the conditions a firefighter would experience during fire suppression (except

for the physical demands). They project an aerial digital photo onto the screen in the classroom so students can see where the fire is located. One trainer uses the fire simulation software to draw fire, smoke, equipment and personnel such as hand crews, bulldozers and engines. He can also show water and aerial retardant dropped on the fire and firelines constructed by hand crews and bulldozers. Students can see these additions on the screen in the classroom. The second trainer keeps track of resources ordered, monitors time and serves as a dispatcher. Using hand-held radios, the dispatcher can talk to the incident commander (the person in charge of the fire) or anyone else at the fire scene.

Students receive information to assist them during the training scenarios. This includes the time and date, a map of the fire area to show topographic and other features, current and expected weather, and a list of resources that are available to be dispatched to the fire. The students must then use the available personnel and equipment to contain the fire. The exercise forces students to make the type



of decisions that are required during actual fire suppression. These include what type of resources to request, how to give instructions using the radio or in person, where to start and construct firelines, how to provide for safety for all personnel and what to do if a change in weather conditions occurs.

The scenarios used in training include individual and group exercises which vary in length and complexity. A review after each training session allows students to discuss what problems they encountered and what they could have done differently to avoid problems. This also gives the students a chance to talk about how they would incorporate what they learned into the situations they face during a real fire.

The Division of Forestry has already conducted a couple of demonstrations of the fire simulator and will begin actual simulator training late this year.



# Kentucky firefighters answer Western call for help

Stories by Gwen Holt  
Division of Forestry

Employees of the Kentucky Division of Forestry are all too familiar with what a summer drought can mean for forest fires. In the summer of 1999, the Commonwealth had its hands full with its worst forest fire season in a decade. As the tables turned west this spring and summer, the Division of Forestry gave other states the kind of assistance it received last year.

When Western states went up in flames, they asked for help from firefighters across the country. Due to the low fire danger at home, the division was

able to send 38 employees to assist with fires in the Grand Canyon National Park in May. In July, 35 division firefighters traveled to Mesa Verde National Park in Colorado. In August, the call for help came again. This time, 18 firefighters traveled to Idaho to battle a blaze in the Bridger-Teton

National Forest. Two employees went to Montana to assist with helicopter operations, and five employees were sent to Texas to work with bulldozers.

While division firefighters provide a very valuable service to other states, they face some tough conditions. Most stay in a camp with tents and very little else, due to the remoteness of many of the fires.

**(Top)** Division of Forestry firefighters battle the flames in Idaho. **(Above)** Marna Smith-Saunders uses a drip torch to ignite an unburned area between the wildfire and the fireline. This practice helps secure the fireline. Photos by Chuck Wilburn



Conditions can range from extreme heat and cold to very rugged terrain. Most camps have teams to prepare meals, but firefighters don't always get to sit down at a table to enjoy lunch or dinner. They



often carry their food with them on the firelines. The volunteers have few opportunities to call loved ones back home and often have to shower from the back of a tractor trailer. This definitely is not a luxurious assignment, but the division never lacks for volunteers.

When Division of Forestry employees volunteer for these opportunities, they are placed on leave from the division and are paid by the U.S. Forest Service. Fourteen days plus travel time is the maximum length of time each crew stays on assignment. Employees who provided this valuable service during the summer of 2000 are provided in the box at right.

Special thanks go to the men and women of the Kentucky Division of Forestry who volunteered to help with the fires out West. Your courage and bravery make you true American heroes.

Chris Adams	Stephen May
Dwayne Anderson	Keith McDaniel
James Armstrong	Ed McNeil
Tom Attebury	Leif Meadows
Jody Benningfield	Joe Metzmeir
Stanley Branham	Logan Mitchel
Roosevelt Bowles	Beth Mizell
Chad Brothers	Candie Nantz
Jerry Brown	Chris Nevins
E.J. Bunzendahl	Chris Ogle
Anthony Carter	David Phipps
Sam Caudill	Lonnie Puckett
James Cloyd	Jane Quillen
Andy Dean	Scott Quinn
Gary Dunn	Pete Rayburn
David Fletcher	Joe Rice
Jason Gabbard	Eugene Salyer
Kevin Galloway	Charlie Saunders
Daniel Garrard	Ben Schaffner
Gary Grant	Scott Shadoan
Steven Graves	Arvist Sinclair
Troy Gullett Jr.	Herman Slone
Tim Haney	Glenn Smith
Mike Harp	Jeff Smith
Tim Justice	Marna Smith-Saunders
Mike Kelly	David Stafford
Chris Kibbey	Stanley Trent Jr.
Lonnie Klopp	Charles Warfield
Don Lam	Terry Webb
J.L. Lawson	Charles Willburn
James Madden	Dennis Woolard
Kayo Maddox	James Workman
Dewey Marshall	

## Forestry employee meets President Clinton

Not all Division of Forestry employees who went to the West were actually on the firelines. Sarah Gracey, forestry program specialist in Frankfort, went to Idaho to serve as an information officer at the Burgdorf Junction fire in the Payette National Forest. While there, Sarah had the honor of meeting President Clinton, who was touring the area and talking with firefighters. "It was a thrilling experience to meet the president, and watching the Secret Service secure the fire camp was very interesting," said Gracey.



**President Clinton autographs a fireline handbook for Sarah Gracey. The president wrote, "To Sarah -Thanks, Bill Clinton"**  
Division of Forestry photo

# Challenging cleanup work makes big impact in small town

By Matt Hackathorn  
Division of Waste Management

New Castle is the kind of place where senior citizens sit outside and wave at passing traffic. It's not a town where you'd expect to find a serious environmental problem. But a recycling center in this small community produced some threatening contamination and left the Kentucky Division of Waste Management with a big cleanup job—a job that is now yielding very promising results.

The Hazardous Waste Branch of the Division of Waste Management is currently working on the cleanup of more than 50 sites across the Commonwealth, including the one in New Castle. Hazardous waste releases into the environment may result from accidents, negligence or knowledgeable disregard, but every situation presents unique circumstances for state regulators.

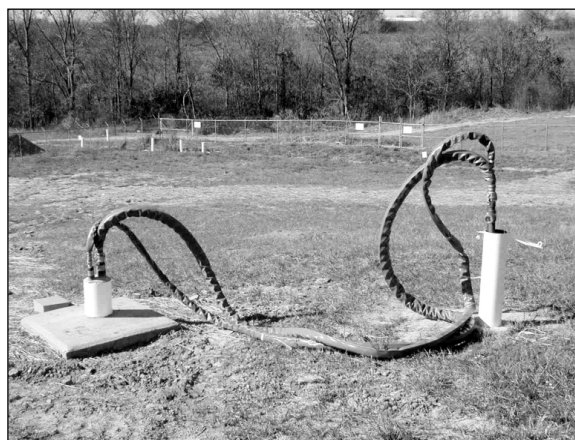
In Henry County, the problem was found at the New Castle Recycling Center, a facility that collects and recycles hazardous waste from businesses and industries all over the country. The business is now owned and operated by international waste recycler Safety-Kleen Corporation.

In April 1986, state hazardous waste regulators determined that the previous owner of the New Castle facility had released extensive volatile organic compounds (VOCs) into the soil and groundwater. These VOCs are mainly chlorinated solvents like trichloroethylene (TCE) which are used primarily as common industrial cleaners. Chlorinated solvents like TCE are carcinogens and can pose a threat to human health, the environment and wildlife.

"The Hazardous Waste Branch sees the contamination of groundwater at New

Castle as a big problem, and we're doing everything we can to get it cleaned up," said Ahad Chowdhury, state project manager for the recycling center. "The contamination entered the groundwater through accidental spills, leaking underground storage tanks and other solvent-handling practices. What's important now is that we've identified the problem and we're getting it fixed."

The cleanup presents a unique challenge because the property sits on top of fractured bedrock which houses several paths for the contaminated water to flow through. Safety-Kleen ran tests to



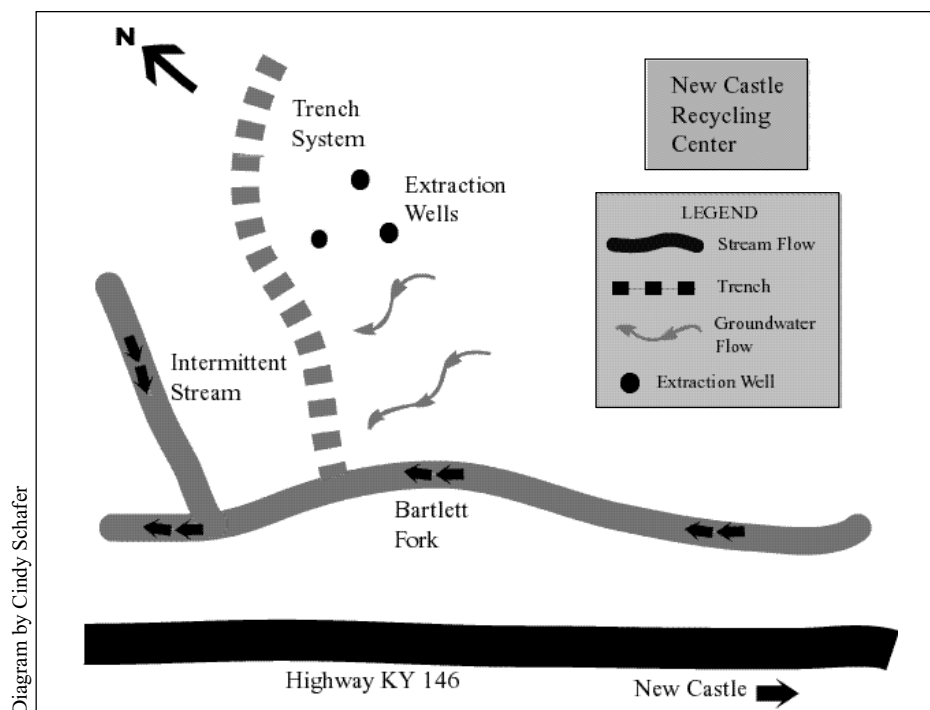
**Portable evacuation wells, like the one depicted above, use a vacuum system to remove groundwater and transport it to a treatment facility on site.**

Division of Waste Management photo

determine how the bedrock and channels within it would affect their efforts to extract contaminated groundwater.

Part of the cleanup involved the construction of a trench system that spans more than 1,000 feet. The trench system captures groundwater as it flows through low-lying areas and toward a creek next to the property. A sump system in the trench pumps the groundwater to a treatment house for removal of VOCs. Concentrated VOCs are also extracted from the bedrock fractures above and below the water table using a vacuum system.

"Approximately 800 gallons of VOCs have been removed from the groundwater and over 20 million gallons of contaminated groundwater has been treated since August of 1993," said Chowdhury. "Recent monitoring results indicate there is a considerable improvement in shallow and deep groundwater quality across the site." So far, the groundwater cleanup at the New Castle Recycling Center has cost the Safety-Kleen Corporation more than \$2.5 million. Chowdhury isn't sure how much longer the cleanup will take, but believes it will continue for at least the next 10 years. "Only one thing is for sure," he said. "We're going to monitor this site until the contamination is reduced to acceptable levels."





**“We are very happy to see the cleanup of this site underway . . . We are hopeful that cleanup work will be completed by this fall.”**

Jeff Grow  
Superfund Project Manager  
Division of Waste Management

## Recycling plant cleanup underway

**By Matt Hackathorn**  
**Division of Waste Management**

The long-awaited cleanup of an abandoned aluminum recycling plant in western Kentucky is underway.

The Superfund Branch of the Kentucky Division of Waste Management negotiated a settlement with six companies to demolish the bankrupt Primary Recovery Corp. plant and remove thousands of tons of salt cake and other hazardous wastes.

“We are very happy to see the cleanup of this site underway,” said Superfund Project Manager Jeff Grow. “Negotiations between the state and the group of companies that did business with Primary Recovery and who volunteered to clean up the site have taken over four years. We are hopeful that cleanup work will be completed this fall.”

Primary Recovery recycled aluminum dross in Drakesboro from 1984 until 1993 when the state shut the operation down for multiple air, waste and water pollution violations.

Dross, the waste material resulting from the production of raw aluminum, is very high in aluminum content. Salt cake is the hazardous byproduct of the dross recycling process and is hazardous because it releases ammonia gas when wet.

The Division of Waste Management declared the site an environmental emergency in 1995.

EnSafe, a Cincinnati consulting firm, works for the six companies identified as potentially responsible parties or suppliers of the now-dissolved Primary Recovery Corp. Ensafe contracted with Koester of Evansville, Ind., to clean up the waste, which is being transported to the



Waste Management landfill in Russellville, Ky.

Koester has set up a stormwater management system to minimize erosion and offsite migration of salt cake during the cleanup.

The contractor will demolish all structures and remove more than 132,000 cubic yards of salt cake and other solid waste. Then, Koester will grade and cap the property with a coarse mixture of rock, sand and geotextile fabric before spreading grass seed on the site.

As part of the cleanup plan, the contractor will monitor the surface water for five years following the removal of the salt cake to ensure the project was successful.

*Photos of the Primary Recovery site by Mark York*

# DO YOUR SHARE FOR CLEANER AIR

## Governor's Scholars clean up the air

By Lillie Cox  
Division for Air Quality

*Cleaning the air made for a busy summer for 60 Governor's Scholars and their instructors. The group helped the Division for Air Quality spread its "Do Your Share For Cleaner Air" message in the Northern Kentucky/Cincinnati area. The Kentucky students, high school seniors this fall, spent five weeks at Northern Kentucky University in June and July. While there, they learned about air quality in the classroom, on field trips, at air monitoring sites and at Emissions ✓ Check sites. They also participated in various community outreach activities.*



(Left, above, below) Scholars did gas cap testing at various Northern Kentucky locations. They checked for leaking or missing gas caps, replaced them with new ones and prevented gasoline fumes from fouling the air. Scholars handed out tip sheets reminding citizens of how they could do their share for cleaner air.



It  
all  
adds  
up  
to  
cleaner  
air!



(Left) Scholars visited Griffin Industries and heard about its recycling efforts and commitment to environmental stewardship. Students sniff the new biodiesel fuel made at Griffin Industries.

"It's great to be able to inform people how to protect our air . . . It's something we all need to contribute to."

G. Wheatley, Lone Oak High School

"People do not realize how much they can help. I really didn't either until this program."

J. Conway, Elliott Co. High School



# CLEANER AIR



Scholars and their instructors marched in Fourth of July parades carrying banners and placards that read “Do your share for cleaner air,” and gave tips such as “Don’t top off your gas tank, save the air” and “Is it your turn to get your Emissions ✓ Check?”



Scholars took a tour of the Campbell County Northern Kentucky Emissions ✓ Station. They watched, listened and learned as citizens got their vehicles checked and congratulated them on their vehicles passing the emissions test.

“Spreading the word about cleaner air through gas cap checks added so much to our class.”

**T. Lockard, Paul G. Blazer High School**

“The Governor’s Scholars Program provided me the opportunity to do my share for cleaner air. People loved getting free gas caps; it was great.”

**C. Whiting, Central High School**

*Photography by Lillie Cox*

Certificates of appreciation were presented to the following scholars:

**Vina Ayers**, Male High School (HS)—Louisville

**Ian Driver**, Owensboro HS

**Sarah Gebelt**, Campbell County HS

**Carla Goodwin**, Hancock County HS

**Stephanie Grant**, Dupont Manual HS—Louisville

**Michael Hogan**, George Rogers Clark HS—Winchester

**Sarah Huff**, Clinton County HS

**Ryan Hunter**, Nicholas County HS

**Sarah Jones**, Barren County HS

**Katie Kunkel**, Warren Central HS—Bowling Green

**Stephen Mattingly**, Saint Xavier HS—Louisville

**Rachel Mulloy**, Ballard HS—Louisville

**Patrick Purcell**, Jeffersontown HS—Louisville

**Hillare Sizemore**, Clay County HS

**Mark Tiemeier**, Newport Central Catholic HS—Ft. Thomas

**Sarah Witten**, Elizabethtown HS

**Jordan Wood**, Muhlenberg HS

**Jessica Brinkman**, St. Henry HS—Erlanger

**Kelly Buntain**, Marion County HS

**Avone Connor**, Dupont Manual HS—Louisville

**Bruce Hatcher**, Hart County HS

**David Lewis**, Paul Laurence Dunbar HS—Lexington

**Blake Montgomery**, Magoffin County HS

**Kate O’Toole**, Villa Madonna Academy HS—Crescent Springs

**Anna Rice**, Fort Campbell HS

**Karen Robb**, Bourbon County HS

**Joe Slusher**, Bell County HS

**Mark Stephens**, Russell HS—Ashland

**Shawn Stickler**, Ballard HS—Louisville

**Lindsay Sullivan**, Dixie Heights HS—Villa Hills

**Angie Thacker**, Boyd County HS

**Alex Wilson**, Nicholas County HS

**Jeramie Wilson**, Butler Traditional HS—Louisville

**Amy Yancey**, Living Waters Christian HS—Shelbyville

**Bill Adams**, Marion County HS

**Samantha Brumley**, Berea Community HS

**Will Carter II**, Ballard HS—Louisville

**Tristan Davis**, Pike County Central HS

**Jessica Hubbard**, Whitesburg HS

**Lakshmi Kartha**, Kentucky Country Day HS—Prospect

**Michael McIntosh**, Buckhorn HS

**Landon Meeks**, Paducah Tilghman HS

**Garrit Murphy**, Jackson County HS

**Sarah Ogbum**, Holy Cross HS—Louisville

**Erin Pelly**, Boyle County HS

**Rebecca Ramey**, Elkhorn City HS

**Nina Robinson**, Seneca HS—Louisville

**Matt Seymore**, Dawson Springs HS

**Shana Stoddard**, Central HS—Louisville

**Whitney Wellman**, Assumption HS—Louisville

**Ashley Wells**, Boyd County HS

**Bethani Bartley**, Pike County Central HS

**Ameerah Cetawayo**, Doss HS—Louisville

**Justin Conway**, Elliott County HS

**Anna Hitron**, Assumption HS—Louisville

**Tasha Lockard**, Paul G. Blazer HS—Ashland

**Beth Mitchell**, Lynn Camp HS—Corbin

**Nick Preston**, Magoffin County HS

**B.J. Privett**, East Jessamine HS

**Matt Purcell**, Jeffersontown HS—Louisville

**Nakeina Smith**, Butler Traditional HS—Louisville

**Patrick Smith**, Franklin County HS

**Mary Sun**, Dupont Manual HS—Louisville

**Kelly Thayer**, Taylor County HS

**Hiren Vallabh**, Corbin HS

**Garrett Wheatley**, Lone Oak HS—Boaz

**Courtney Whiting**, Central HS—Louisville

Instructors: **Jamie Hester**, Garrard County HS

**Greg Smith**, Shelby County HS

# Prepare your home now for wintertime energy savings

By Karen Landry  
Division of Energy

*With utilities warning of higher prices for heating fuel and natural gas this winter, now is the time to think about keeping those bills to a minimum. While you can't control the prices or the weather, you can do something to help reduce the amount of energy used to heat your home.*

*The following tips will help you save energy and money and make your home more comfortable this winter.*



## Energy-saving habits to practice throughout the season

- Clean or replace furnace filters once a month and save up to 10 percent on your heating bill.
- Keep your thermostat as low as is comfortable (around 72 degrees). You may want to lower the thermostat setting to around 55-60 degrees at night or during the day when people are not home. During each 24-hour period, you will save about 3 percent on your heating bill for every 1 degree that you lower the thermostat setting. Consider buying a programmable thermostat so you don't have to remember to adjust the thermostat.
- On sunny days, open curtains and shades on south facing windows to allow sunlight to enter your home; close them at night to reduce heat loss.
- Use kitchen, bath and other ventilating fans wisely. Turn these fans off as soon as they are no longer needed. In about one hour, these fans can pull out a houseful of warmed air.
- When the fireplace is not in use, keep the flue damper tightly closed. Fireplaces are not efficient sources of heat. Although they heat the surrounding area, they also draw cold air in through the rest of your house and draw much of the heat in your house out through the chimney. Fireplaces also produce significant air pollution.

The Kentucky Division of Energy distributes the booklet "Energy Savers: Tips on Saving Energy & Money at Home" and other guides on saving energy. Please call (800) 282-0868 or visit the division's Web site at <http://www.nr.state.ky.us/nrepc/dnr/energy/doetips.html> for more information.

## Preparing your home for winter

- Check your ducts for air leaks. First, look for sections that should be joined but have separated; then look for holes. Consult a professional about repairing duct leaks. Safe duct repairs require a licensed heating, ventilation and air-conditioning contractor.
- Apply caulk around the frames of exterior doors and windows, and install weatherstripping around exterior door openings. Plastic film kits, available in hardware and home improvement stores, also help reduce heat loss through windows.
- Caulk and seal air leaks around pipes or electrical wiring on ceilings, floors and exterior walls.
- Install rubber gaskets behind outlet and switch plates on exterior walls.
- Look for dirty spots in your insulation, which often indicate holes where air leaks into and out of your house. You can seal the holes by stapling sheets of plastic over the holes and caulking the edges of the plastic.
- Cover your window air conditioner with plastic and seal off the inside and outside edges with duct tape.

## Water Heating

For most of us, water heating is the third-largest energy expense, accounting for about 14 percent of a home's utility bill. (Heating and cooling, and lighting, cooking and other appliances are the biggest energy expenses.) You can save energy for heating water by following these simple tips:

- Use less hot water—run full dishwasher loads; take shorter showers; wash clothes in warm or cold water, and rinse them in cold water and wash only when you have full loads; install nonaerating, low-flow faucets and showerheads.
- Insulate your gas or oil hot water storage tank and pipes, but be careful not to cover the water heater's top, bottom, thermostat or burner compartment. When in doubt, get professional assistance.
- Set your hot water heater thermostat at 120 degrees (or on "low"). It's hot enough for most needs—including dishwashers, which are generally made with booster heaters—and it cuts down on energy needed to keep water hot in the tank.

# Recycling . . . Behind the Scenes

By Cindy Schafer  
Public Information and Education Branch



Imagine 320 African elephants sitting in a Frankfort warehouse, each standing 10 feet tall. They would weigh as much as the amount of paper collected by the state government Paper Recycling Program last year.

No matter how you shred it, the recycling program has become a large-scale operation that sets a standard for others to follow.

The home base for the operation is located on the Buffalo Trace Distillery property in Frankfort. Inside the structure are shredders, balers and containers full of white, mixed and corrugated paper (cardboard). Approximately 135 tons of paper are recycled there each month. Workers sort paper by hand according to its grade. Then they load the paper onto a conveyor belt where it travels to a shredder, and then is baled or left loose for transport.

Four Division of Waste Management employees perform these tasks. They receive additional assistance from occupants of the Frankfort Career Development Center. It is not a glamorous job. The bins are heavy, the balers and shredders are noisy, and the warehouse is hot in summer and cold in winter. These men work diligently to keep unnecessary wastes from filling up Kentucky's landfills.

"The Paper Recycling Program was recognized as being one of the finest state-of-the-art programs in the United States a few years ago," said Charlie Peters, supervisor of the Resource Conservation Section.

Peters is proud of the program and the improvements that

## Checklist for developing a recycling program:

- ✓ **Contact recyclers** in your area to ensure that markets exist for recovered office paper.
- ✓ **Decide which materials to collect.** Initially, two or three grades of paper are collected—white ledger, mixed paper and corrugated paper.
- ✓ **Decide how you will collect** your material. Visit an existing program and observe how they operate.
- ✓ **Appoint a program coordinator.** Find someone responsible for the development and ongoing management of the program.
- ✓ **Educate your employees.** Take time to familiarize employees with desktop separation and with the location of recycling containers in the facility.

have taken place over the years. When the program began in 1980, it recovered almost 150 tons of material a year. In 1999, the program collected 1,600 tons. What was once a small operation has grown into a very productive one in state government today.

The program markets five grades of paper. Newsprint, ground-wood computer printout, regular computer printout, sorted office paper (mixed) and white ledger are collected on scheduled visits to more than 100 state office buildings in Frankfort. Confidential material makes up a large amount of the state government paper trail, and the program shreds and recycles nearly 800,000 pounds a year.

Once processed, the material is transported and sold to a private contractor. Revenue from the sale is placed in the Resource Conservation Fund to help pay for the program, the salaries of its employees and to purchase additional equipment. Last year, the fund earned \$117,327.

The program assists all state universities in developing and implementing recycling programs. Efforts are also being made to work with the state parks system. The program purchased a baler for Jenny Wiley State Park to help it begin recycling corrugated paper.

Peters says that getting folks to start recycling diligently is the hard part. Once they realize how much they are helping to care for their environment, recycling becomes part of their daily routine.

To receive detailed information about starting a recycling program in your organization, contact Fred Kirchhoff, Division of Waste Management, 14 Reilly Rd., Frankfort, KY 40601 or call (502) 564-6716.

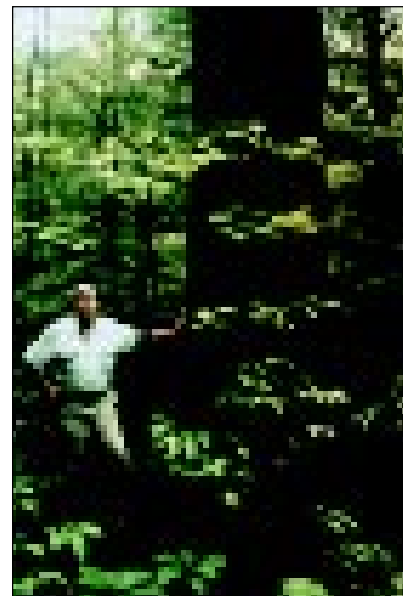
(Top left) Tony Dean, left, and Shaun Yunt place paper on the conveyor belt to be shredded. (Above) A bale of corrugated paper is ready for transport to the recycling contractor. Photos by Cindy Schafer



# Progress made, help needed in effort to protect forest

By Marc Evans

Kentucky State Nature Preserves Commission



(Left) View of Blanton Forest from Knobby Rock; (Top) Dr. William Martin, Kentucky Heritage Land Conservation Fund Board, stands next to a large old-growth chestnut oak; (Below) Cinnamon ferns grow in the bog. Photos by the Kentucky State Nature Preserve Commission

Friends of the forest can help the Kentucky State Nature Preserves Commission meet its goal of raising \$3.5 million to protect Kentucky's largest old-growth forest. The commission has made great strides since it kicked off a fundraising campaign for Blanton Forest last fall.

The forest sits on the southern slope of Pine Mountain in Harlan County. It contains stands of ancient hemlock, oaks, rhododendron, mountain laurel and a great diversity of other trees, shrubs and wetland plants. Watts Creek, a pristine mountain stream, supports a population of blackside dace, a small fish that the federal government classifies as threatened. Numerous species of animals call Blanton Forest home.

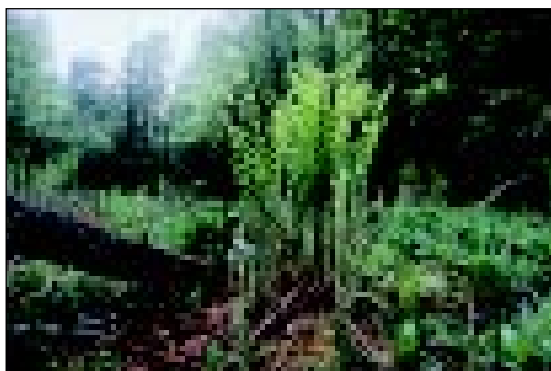
The Kentucky State Nature Preserves Commission has worked diligently to protect the 2,350-acre forest since 1992, when it was recognized as a rare treasure. The commission acquired 1,075 acres of the old growth in 1995. Now, after six years of negotiating, the commission has acquired an option to purchase the rest of the old growth, as well as an option on an important buffer area of mature forest. The agency's design for this preserve includes the core old-growth forest of 2,350 acres and surrounding buffer to ensure its protection, for a total of

6,700 acres. With more than 60 privately owned tracts, the commission expects the protection of all this land to be a long-term effort.

That effort has gotten a big boost since last fall when the commission launched a campaign to raise \$3.5 million. Since then, the campaign received \$600,000 from the Kentucky General Assembly and a \$500,000 grant from the James Graham Brown Foundation. The U.S. Environmental Protection Agency has promised a \$250,000 grant and the commission has received private pledges of \$350,000. Also, an additional \$350,000 from the Kentucky Heritage Land Conservation Fund is available for the effort.

These donations have pushed the commission much closer to its fundraising goal, but now it needs the public's help to complete its mission. Donations of any size are welcome to help with the largest natural area preservation project ever undertaken in Kentucky. Your donation is tax deductible.

For more information, contact the Kentucky State Nature Preserves Commission at (502) 573-2886 or visit the Blanton Forest Web site at [www.blantonforest.org](http://www.blantonforest.org). You can also contact the Kentucky Natural Lands Trust, the nonprofit organization that is doing the actual fundraising, at (877) 367-5658.





# Forging a path to preservation

By Shad J. Baker  
CEA for Agriculture  
Natural Resources & Community  
Development  
Letcher Co. Cooperative  
Extension Service

Looking out over the ridges and hills from high atop Pine Mountain, it's easy to forget that there's anyone else on earth. The only sounds you're likely to hear are the scratching of squirrels' claws as they scamper to the top of a nearby hickory, the gentle whisper of breezes slicing through the pines or the shrill call of a red-tailed hawk riding on the mountain winds.

This mountain is teeming with plant and animal life. On its back and cradled in its wooded arms rest three parks, including Kentucky's first (Pine Mountain State Resort Park), and five state nature preserves. The mountain is also home to Blanton Forest, the state's largest old-growth forest. Visitors to the mountain

can see wildflowers such as rose pogonia, which is found nowhere else in the state. Black bear and Kentucky's only nesting pair of ravens are among the numerous species of wildlife found here. Down the mountain's sides tumble waterfalls that form the headwaters of the Big Sandy, Kentucky and Cumberland rivers. Deep underground caves feature stalagmites that are a millennium old.

In an effort to ensure that the mountain remains a natural showcase, the Pine Mountain Trail Conference is working to develop a hiking trail stretching 120 miles from the Breaks Interstate Park to Pine Mountain State Park and then south to Cumberland Gap National Historical Park. The conference is a small nonprofit organization committed to the trail's construction. The group works for the sole purpose of creating a trail to showcase the wild highlands and conserve the natural and cultural heritage of Appalachia for future generations.

A crowning achievement came last year when the project was recognized for its linkage of past, present and future by being named Kentucky's Millennium

**"The trail showcases the beauty of the mountains seen from the Pine Mountain ridge. No other view rivals those seen from the trail."**

Ross Kegan

Legacy Trail by the White House Millennium Council. With this distinction come the hopes that help from state, federal and private sources will make the project a reality. So far the conference has roughly 28 miles of the trail in place and anticipates completing the other 90+ miles in the next seven to eight years.

Volunteers from the American Hiking Society and local groups added nearly two miles this past spring. They paint markings on trees that mark the route, cut brush that obstructs the trail, create a trail bed or actual path, install signs as needed and pick up garbage.

"The trail showcases the beauty of the mountains seen from the Pine Mountain ridge. No other view rivals those seen from the trail," said Ross Kegan, a hiker and board member of the Pine Mountain Trail Conference. "The trail offers an opportunity for backpackers to enjoy the beauty of the Appalachians, plus it provides a small component of eco-tourism to the local economy," he said.

Kentuckians interested in helping with the project can contact the Pine Mountain Trail Conference via the Letcher County Cooperative Extension Service at P.O. Box 784, Whitesburg, KY 41858. You can also call (606) 633-2362 or visit the group's Web site at [www.pinemountaintrailconference.org](http://www.pinemountaintrailconference.org).



## Members of the Pine Mountain Trail Conference include:

U.S. Forest Service  
National Park Service  
American Hiking Society  
University of Kentucky Cooperative  
Extension Service  
Kentucky State Nature Preserves  
Commission  
Kentucky Division of Forestry  
Kentucky Department of Parks  
Kentucky Department of Fish  
and Wildlife Resources  
Appalshop  
The Sierra Club

# Tobacco settlement funds will help address animal waste

By Steve Coleman, Director  
Division of Conservation

Farmers who must manage animal waste will benefit from \$18 million in funding from the national tobacco settlement. Kentucky's legislature parceled out some of the state's share of the settlement to the Kentucky Soil Erosion and Water Quality Cost Share Program, administered by the Division of Conservation. Lawmakers set aside \$9 million in settlement funds for fiscal year 2001 (which began in July) and the same amount for fiscal year 2002.

The national tobacco settlement includes \$206 billion to be split between 46 states over a period of 25 years. (Four states settled separately). The historic deal was signed between the states and the nation's largest tobacco companies to compensate states for past tobacco-related health care costs. Kentucky lawmakers decided to use a portion of the Commonwealth's share to enhance the cost share program. The program already had a budget of \$2.1 million per year.

The General Assembly established the cost share program to give landowners and citizens across the Commonwealth technical and financial assistance in addressing environmental concerns. The program's main focus is to assist farmers in developing and implementing agriculture water quality plans. The best management practices approved through the state cost share program help reduce animal waste nutrients, prevent the loss of topsoil and minimize sediment and other nonpoint source pollutants in Kentucky's streams, rivers, lakes and groundwater supplies.

This spring, 1,166 applicants requested \$12.6 million in cost share assistance from the program. Based on the available dollars, the Kentucky Soil and Water Conservation Commission reviewed, ranked and approved 877 applications in 104 counties at a cost of \$10.7 million. The commission



(Above) Funds from the tobacco settlement will help farmers address animal waste concerns. This litter storage structure was built to reduce the exposure of the litter to rainfall, which can lead to runoff and impact water quality. (Left) This swine waste lagoon must be maintained properly so that waste cannot contaminate nearby streams. Division of Conservation photos

gives priority to projects that address animal waste concerns and to individual applicants who are enrolled in agricultural districts with identified water quality programs.

The bulk of the approved funding goes to applications with best management practices that address animal waste. Beef operations received \$4.4 million, poultry operations got \$3.6 million and dairy farmers received \$1.6 million. Another \$66,500 was approved for swine operations to improve animal

waste management programs. Applications involving practices to address soil erosion also received funding.

In addition, the commission approved 39 environmental grants to local conservation districts for community projects such as metal and white goods pickup/recycling, dead animal removal, a watershed awareness program for landowners and water quality monitoring.

For more information concerning this program, please contact your local conservation district.



## Annual Governor's Conference will be held this month

There's still time to register for the annual Governor's Conference on the Environment, Oct. 30-31. This year, the conference will be held at the Embassy Suites in Lexington.

On Monday and Tuesday, four daytime meetings will focus on air quality, water quality and solid waste issues. The presentation of the annual Environmental Excellence Awards and cabinet Outstanding Employee Awards will take place during the evening banquet on Monday.

Registration for the conference will be \$70 after Oct. 20.

Embassy Suites is located at 1801 Newtown Pike. Rooms have been reserved for the conference at a rate of \$109 for single occupancy and \$119 for double. Call Embassy Suites at 1-800-EMBASSY or (606) 455-5000 to reserve your room.

For conference information, visit the conference Web site at [www.kyenvironment/nrepc/governor/govhome.htm](http://www.kyenvironment/nrepc/governor/govhome.htm)

or call Boyce Wells at (502) 564-2150.

# Web Watch

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## New address makes it easier to find cabinet online

Birthdays, checking account numbers, your anniversary and where you left your car keys—we have lots of things to remember each day, so lengthy or complicated Web site addresses can be easily forgotten. That's why the Kentucky Natural Resources and Environmental Protection Cabinet decided to create a new Internet address that's easier for our customers to remember.

You can now find the cabinet's home page online at [www.kyenvironment.org](http://www.kyenvironment.org). If you "bookmarked" the cabinet's previous address at [www.nr.state.ky.us](http://www.nr.state.ky.us), you can still connect with our Web site there too.

If you've never visited the cabinet's home page, you've missed out on lots of valuable information. You'll find links to all of the cabinet's departments and divisions including forestry, energy, water, conservation and waste management. The "what's new" section offers you a look at the latest cabinet press releases and events. The home page also features photos of unidentified illegal dumpers and information on obtaining a Kentucky nature license plate.

We hope you'll take advantage of the wide array of information offered at [www.kyenvironment.org](http://www.kyenvironment.org).

## Forestry Web site gets a "make-over"

Check out the Kentucky Division of Forestry's Web site this fall. The division

plans to unveil the site's new look when its current overhaul is complete. The most exciting addition to the Web site will be an interactive kids' page with puzzles, a coloring book and links to the Official Smokey Bear and National Geographic Fantastic Forest Web sites. The improved site will also include a list of the educational materials available through the division, current forest fire information and several forms and applications available for downloading, like the tree seedling order form.

You will find the division's updated Web site later this fall at [www.kyenvironment.org/nrepc/dnr/forestry/dnrdo.html](http://www.kyenvironment.org/nrepc/dnr/forestry/dnrdo.html).

## A look at our laboratory

Did you ever wonder who performs the tests on all those samples taken from Kentucky's storage tanks, streams and air monitoring stations? You can learn all about the Natural Resources and Environmental Protection Cabinet's centralized laboratory testing facility at [www.nr.state.ky.us/nrepc/dep/lab/deshome.html](http://www.nr.state.ky.us/nrepc/dep/lab/deshome.html).

Testing provided by the Division of Environmental Services' laboratory supports the programs that assess the environmental status of the Commonwealth. The testing looks for pollutants and also evaluates the risk factor to human and ecological health.

To learn more about the centralized lab and its responsibilities, check out its new Web site.

## Air Quality permits now available on the Internet

You can learn which facilities possess or have applied for Title V air quality permits by logging onto the World Wide Web. The Division for Air Quality now provides public access to these permits on its Web site at <http://www.nr.state.ky.us/nrepc/dep/daq/prb/titleva.htm>.

The page lists all facilities for which a draft, proposed and/or final Title V permit has been issued, as well as other documents associated with each permit. Title V permits are operating permits issued by the state under authority granted by Title V of the Clean Air Act Amendments of 1990. The permits regulate such emissions as volatile organic compounds, sulfur dioxide, carbon dioxide, particulate matter and hazardous air pollutants.

The documents on the Title V Web page are sorted alphabetically and by county. They can be viewed using Adobe Acrobat Reader, which may be downloaded at no cost from Adobe. In addition to permits, the page features the public notice, application summary form, statement of basis and strategy checklist form associated with each permit. Any questions or comments related to the site should be directed to the Permit Review Branch at (502) 573-3382.

## KSNPC gets a new Web address and new look

In honor of the Kentucky State Nature Preserves Commission's (KSNPC) upcoming 25th anniversary celebration, the commission is unveiling a new look and new Web address for its Web site. KSNPC's new address in cyberspace will be [www.kynaturepreserves.org](http://www.kynaturepreserves.org). KSNPC feels that the Web is a valuable tool for informing the public of who they are and what they do. This new, easy-to-remember address will make that tool a lot simpler to use.

Also, the Web site will have a fresh new look and easier-to-navigate pages, so learning about the commission and utilizing its information on rare and exemplary plants, animals and natural communities of the Commonwealth will be much easier. But don't take their word for it. Look for yourself, and let them know what you think by e-mailing [bryce.fields@mail.state.ky.us](mailto:bryce.fields@mail.state.ky.us).

# Investigators help cabinet carry out its mission

By Heather Frederick  
Public Information and Education Branch

An engineer representing a mining company forges two signatures on a mining permit application. One of the names he forges raises suspicion in the Department for Surface Mining Reclamation and Enforcement (DSMRE). Now a question must be answered: Is the application legitimate or was fraud involved? This is where the Office of Inspector General (OIG) enters the picture, at the request of the DSMRE Division of Permits.

The OIG is largely known for its involvement in the illegal dumping initiative of the Natural Resources and Environmental Protection Cabinet (NREPC), but OIG investigators do a lot more than tackle trash.

An order signed by Gov. Patton created the OIG on March 30, 1999. The governor established the office to provide professional-quality investigative services to the NREPC, to support surveillance efforts at illegal dumpsites and to facilitate the prosecution of environmental crimes.

"Skip traces" are one of the OIG's many tasks. When cabinet attorneys or enforcement personnel need to send official documents to a person who has "skipped town," OIG investigators work to determine where the person has moved since their last known address.

"Finding someone who has been very difficult or impossible to locate through normal means gives me a sense of accomplishment," said Barbara Barnes, an environmental enforcement specialist. "Sometimes it's not the obvious places that you look that you get the answer."

Barnes is one of 15 full-time employees in an office that is headed by Inspector General David Perkins. Barnes is part of the OIG's Executive Support Section. In addition to locating individuals, this unit conducts management audits and sensitive pre-employment background investigations, and works to identify and cite illegal dumpers recorded by the cabinet's hidden video cameras. Additionally, the section assists the cabinet's Department for Environmental Protection by conducting ownership and control investigations of entities applying for permits.

The Special Operations Section of OIG is the unit you've probably heard more about. These employees install those hidden cameras and review the footage of people caught dumping their trash illegally. They may also enhance the footage to give investigators in the Executive Support Section a better chance of locating the dumpers.

Investigator Barnes has a strategy for figuring out who those illegal dumpers are. "It's a matter of asking a lot of people and showing them the video and seeing if they can identify



(Top) Employees install a hidden camera at an illegal dump in western Kentucky. (Center) Environmental Enforcement Specialist Barbara Barnes conducts a deed search as part of her work with the Office of Inspector General. Photos by Chuck Hines and Heather Frederick

them," she said. That includes showing the tape to workers in the county clerk, sheriff and post offices, as well as to area merchants and gas station employees. "I ask everyone because you never know who's going to have the answer," Barnes said.

If an investigation uncovers evidence of a potential environmental crime, the OIG refers the case to the appropriate law enforcement agency and to the Kentucky Environmental Crimes Workgroup. The workgroup is a body of state and federal agencies that work together to combat environmental crime. OIG investigators do not have sworn law enforcement powers, so they can only conduct civil investigations.

The OIG's work also involves fires that are intentionally set. The office worked with the Kentucky Division of Forestry to establish the Wildland Fire and Arson Prevention Task Force. This is a multi-agency group designed to enhance cooperation and coordination of efforts in the prevention of arson and wildland fires. Wildlands are forests and other lands that are not urban, developed or cultivated.

The OIG's investigation of the suspected forgery on the mining permit produced results. When Barnes talked with the engineer involved in the case, he admitted his wrongdoing, saying he felt pressure from the company to complete the application process quickly. The man lost his engineering license for a year; that punishment will be followed by two years of probation from the licensing board.

The forgery probe is one of many success stories for the OIG. "Without a doubt, I can say the thing I am most proud of in regard to OIG is my staff," said Inspector General Perkins. "I feel very fortunate to be associated with such a fine group of dedicated, conscientious employees who genuinely care about what they are doing."





# Accomplishments can be reviewed in Heritage Land program report

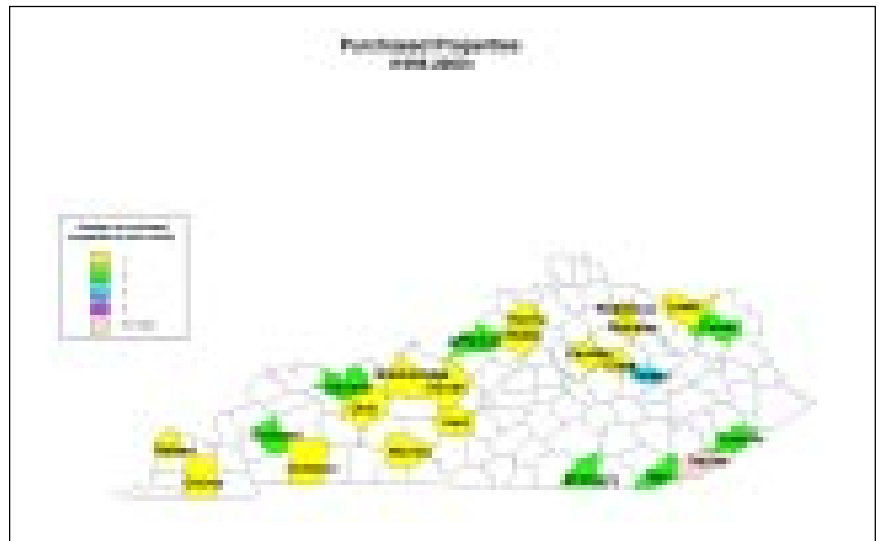
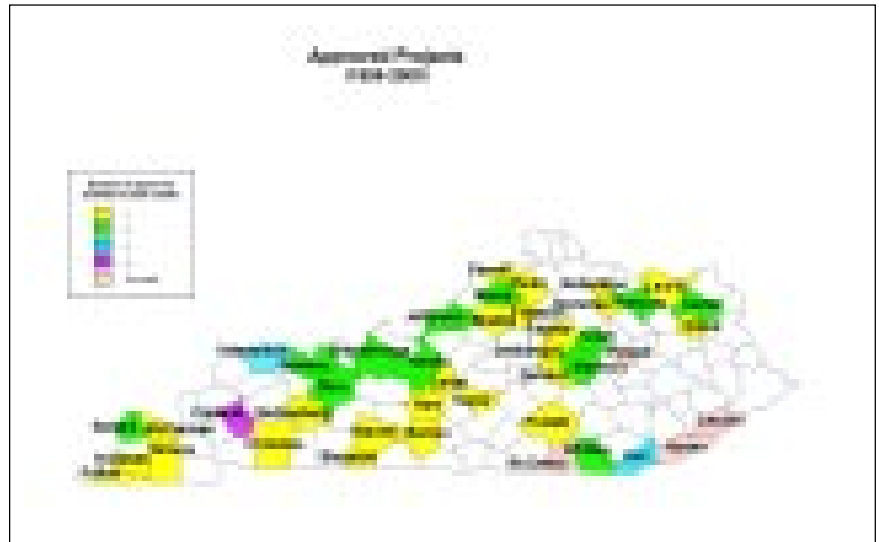
By Mary Jean Eddins  
Department for Natural Resources

The Kentucky Heritage Land Conservation Fund Board's fifth annual report is now available. This report summarizes the board's actions for the fiscal year that ended on June 30, 2000.

The board's mission is to award funding for the purchase and preservation of selected natural areas in the Commonwealth, protect rare and endangered species and migratory birds, save threatened areas of natural importance and provide natural areas for public use, outdoor recreation and education. These activities are funded by the state portion of the unmined minerals tax, environmental fines, the \$10 additional fee to purchase a Kentucky nature license plate and interest on the fund's assets.

The annual report provides details on the 23 projects in 18 counties the board approved during fiscal year 2000. It also details the land purchases finalized on 10 different projects and efforts to promote Kentucky's newest nature license plate.

If you would like a copy of the full report or more information about the Kentucky Heritage Land Conservation Fund and/or Kentucky nature license plates, please contact Mary Jean Eddins at (502) 564-2184 or by e-mail at [mary.eddins@mail.state.ky.us](mailto:mary.eddins@mail.state.ky.us).



## Taking the office on the road

James Bickford, secretary of the Natural Resources and Environmental Protection Cabinet, got a first-hand look at a "mobile office" prototype his agency is evaluating.

Bickford is holding an electronic signature pad that would allow inspectors and mine operators to sign paperless reports generated in the field on a laptop computer. The signature pad is part of the model being tested in the Department for Surface Mining Reclamation and Enforcement.



Photo by Ralph King, Department for Surface Mining Reclamation and Enforcement

# Awards

## 2000 Small Business Air Quality Stewardship Awards presented

By Rose Marie Wilmoth, Air Quality Representative  
Dept. for Environmental Protection

Three Kentucky businesses walked away with honors last month at the Small Business Air Quality Stewardship Awards ceremony at the Lieutenant Governor's Mansion.

The winning businesses were:

- All Rite Ready Mix Co., Florence
- Hibbitts Construction Inc., London
- Cardinal Kitchens Inc., Louisville

The Small Business Stationary Source Compliance Advisory Panel established the award in 1997 to recognize small businesses that have taken the initiative to reduce the impact of their operations on air quality.

### All Rite Ready Mix Co.

All Rite Ready Mix Co. operates concrete plants in Florence and Wilder. Key features of the plants include recycling water from retention ponds to control dust and operating a \$1 million washout system for trucks.

Three acres of the 10-acre Florence site are landscaped to serve as a buffer and

wildlife habitat.

### Hibbitts Construction Inc.

Hibbitts Construction Inc. is an asbestos abatement company that provides services statewide. The company is a problem solver and sets a standard with its ability to accurately assess a situation and apply the appropriate federal or state regulatory requirement.

Its work practices demonstrate initiative, innovation, competence and a cooperative spirit.

### Cardinal Kitchens Inc.

Cardinal Kitchens Inc. manufactures Formica™ kitchen countertops in Louisville. The company invested \$200,000 to convert to a water-based adhesive laminating system. This investment resulted in an 88 percent reduction in emissions, reducing volatile organic compounds (VOCs) emissions by 14 tons and

hazardous air pollutants by 4.8 tons.

The system has been so successful in reducing emissions that the company has visitors from around the country examining it for possible use in their operations.

All three of these companies foster the ethic of air quality stewardship that the panel wanted to recognize when it established the awards three years ago. Features of each winner's system could be incorporated into other small business operations to improve air quality.



Left to right: Jean Watts, Panel Public Information Committee chairwoman; Cabinet Secretary James E. Bickford who presented the award to Barry Nugent, Cardinal Kitchens Inc.; and Alice Howell, committee member and panel vice-president.

Photo by Rose Marie Wilmoth

## Employees capture first place in competition

By Lee Florea

Department for Surface Mining Reclamation and Enforcement

Artistic skills and knowledge rated three Kentucky Department for Surface Mining Reclamation and Enforcement (DSMRE) employees "the best" in a recent state competition. The DSMRE team won first place after designing a poster that depicts their department's Geographic Information Systems (GIS) activities. The competition was part of the 2000 Kentucky GIS Conference.

The GIS program is currently pursuing three major projects:

- Providing digital permit information to field inspectors and permit reviewers.

- Designing a method for streamlining responses to citizen inquiries.
- Creating custom maps for technical investigations.

These projects are part of the department's plan to convert all paper data to an electronic format.

**Christy Rice, Lee Florea and Daryl Hines stand in front of the poster they designed.** Photo by Ralph King, Department for Surface Mining Reclamation and Enforcement



## Awards given for conservation work

By Martin Bess  
Division of Conservation



Left to right: Steve Coleman, Division of Conservation director; David Sawyer, state conservationist for Kentucky, U.S. Department of Agriculture, Natural Resources Conservation Service; Pearl S. Reed, chief, Natural Resources Conservation Service and recipient of the Distinguished Service Award and David Gerrein, chairman, Kentucky Soil and Water Conservation Commission.

Photo provided by the Division of Conservation

District.

**Conservation District Junior Board Award:** Taylor County Conservation District Junior Board.

**KACD Auxiliary Scholarship:** Eric Wooldbridge, Lincoln County.

**George Crafton Memorial Scholarship:** Joseph B. Atwell, Hart County.

**Kentucky Envirothon Competition Winner:** Caldwell County High School.

Several individuals and groups received recognition for their efforts this summer during the 57<sup>th</sup> Annual Kentucky Association of Conservation Districts (KACD) state convention in Bowling Green. Here's a list of the award winners:

**Distinguished Service Award:** Pearl S. Reed, chief, Natural Resource Conservation Service (USDA).

**2000 Conservation Person of the Year:** Mrs. W.L. (Sally) Brown, Oldham County.

**2000 Outstanding Conservation Cooperator Award:** State winner: Franks Sunrise Farm, Todd County (awarded \$500), owned by Mr. and Mrs. Allen Franks and Mr. and Mrs. Tim Franks. State runner-up: Mr. and Mrs. Roger Osburn, Hopkins County (awarded \$250).

**Outstanding Environmental Education Award of the Year:** Lyon County Conservation District.

**Secondary Teacher of the Year:** Phillip L. McGlone, Harrison County.

**Elementary Conservation Teacher of the Year:** Debra Spillman, Barren County.

Three Goodyear awards emphasize the planning and evaluation of conservation district services:

**Goodyear Conservation Awards:** Mercer County Conservation District, eastern Kentucky, and Barren County Conservation District, western Kentucky.

**Goodyear Honor Awards:** Boyle, Clark, Daviess, Fayette, Fleming, Graves, Hart, Hopkins and Scott County conservation districts.

**Goodyear Area Winners:** Area 1 – Fulton County, Area 2 – Todd County, Area 3 – Warren County, Area 4 – Bullitt County, Area 5 – Campbell County, Area 6 – Lincoln County, Area 7 – Bell County, Area 8 – Bath County, Area 9 – Knott County.

**Forestry Award:** Pulaski County Conservation District and the South Central District of the Kentucky Division of Forestry.

**Soil Stewardship Award:** Todd County Conservation

## *Land, Air & Water* wins KAGC award

By Heather Frederick and Cindy Schafer  
Co-editors of *Land, Air & Water*

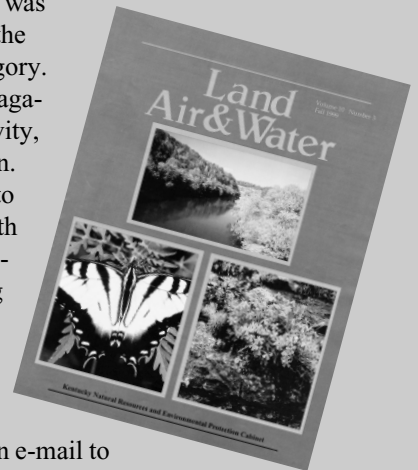
The fall 1999 issue of *Land, Air & Water* received an award of Honorable Mention at the Kentucky Association of Government Communicators (KAGC) Blue Pencil/Gold Screen Award ceremony in August.

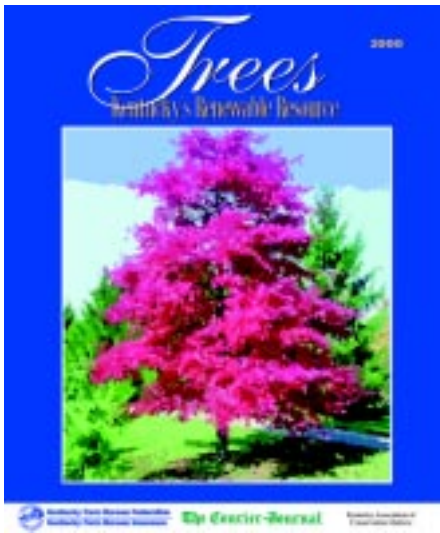
The magazine was judged by a group of experts in the field of advertising and communications. More than 150 entries were submitted in various categories.

*Land, Air & Water* was entered and judged in the 4-color magazine category. Judges critiqued the magazine on content, creativity, design and composition.

We will continue to provide our readers with up-to-date environmental information relating to Kentucky.

Please let us know what topics you'd like to see covered in the magazine by sending an e-mail to [Cynthia.Schafer@mail.state.ky.us](mailto:Cynthia.Schafer@mail.state.ky.us).





# Students to focus on importance of trees

**By Martin Bess**  
**Division of Conservation**

Students across the state of Kentucky can show off their creative talents by tackling the topic of trees this fall.

“Trees, Kentucky’s Renewable

Resources” is the title of the 2000 Conservation Writing Contest and the Jim Claypool Art Contest this fall. Students in grades six through 12 will express their thoughts on the topic in the annual essay contest, while students in grades one through five draw their ideas in the art contest. Last year, students in every Kentucky county participated in the competitions.

Teachers and students will find contest rules in a publication entitled “Trees, Kentucky’s Renewable Resources.” It is available at all local conservation district offices.

Schools select their winners by late November and send

them to the conservation district offices to compete at the county level. County winners compete at the area level, then area winners move on to a statewide competition.

First- and second-place state winners and area award winners will take home savings bonds and personalized plaques. First-place county winners will receive a savings bond and certificate and second-place winners will receive a certificate. Certificates of Achievement will be presented for the best writing entry and/or artwork at each school. Prizes will be awarded in every county.

The contests, which take place between Oct. 1 and Nov. 30, are sponsored by The Courier-Journal, Kentucky Farm Bureau, the Kentucky Association of Conservation Districts and the Kentucky Division of Conservation in cooperation with many other state and federal agencies.

For more information, contact your local conservation district office or the Kentucky Division of Conservation at (502) 564-3080.



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